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ABSTRACT

A workplace literacy program was designed to improve the literacy skills of entry-level workers in the housekeeping, food service, and laundry departments of Grady Memorial Hospital in Atlanta. Classes were held twice per week for 36 weeks at the hospital on job time. Literacy was defined as reading, writing, oral communication, and problem solving. Materials were developed on the basis of a job literacy audit that included interviews with and observation of workers, interviews with supervisors, and analysis of written materials pertinent to the job. The whole language approach was used by one full-time instructor, one part-time instructor, and several volunteers who taught 66 participants (primarily black women with an average of 10.5 years of employment at the hospital). Students were assessed before and after instruction by a Cloze reading test, using passages from job materials; a writing sample yielding a writing process score; and role-playing of a job situation scored for oral communication. Statistically significant gains were obtained for reading, writing, and oral communication. Participants believed that the program increased their academic skills (61 percent), improved their oral (39 percent) and written (34 percent) expression, improved their job knowledge (29 percent), increased their confidence (27 percent), and refreshed their basic education (24 percent). Supervisors believed the program benefited workers, especially in oral communications. (The document includes 18 references, a curriculum outline for classes, a process writing scoring guide, an oral communication comprehensibility rating scale, a sample instructional plan, an external evaluator's report, and a dissemination plan.) (CML)

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HOSPITAL JOB SKILLS ENHANCEMENT PROGRAM: A WORKPLACE LITERACY PROJECT

FINAL EVALUATION REPORT

U.S. DEPARTMENT OF EDUCATION WORKPLACE PARTNERSHIP PROGRAM

Center for the Study of Adult Literacy
Georgia State University, Atlanta

and

Grady Memorial Hospital, Atlanta

March 1990

U.S. DEPARTMENT OF EDUCATION
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Prepared by Joanne R. Nurss, Director
Center for the Study of Adult Literacy
Georgia State University, Atlanta

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Project Staff

This project was a collaborative effort of several persons all of whom contributed directly or indirectly to this report.

Dr. Nancy Chase, Curriculum Developer

Ms. Ama Saran, Instructor

Ms. Judy Hiles, Graduate Research Assistant

Ms. Carol Bartlett, Part-time Instructor

Ms. Sheryl Gowen, Doctoral Researcher

Ms. Nancy-Laurel Pettersen, Volunteer

Ms. Jorie Philippi, Workplace Literacy Consultant

Dr. Noreen Steward, Communication Consultant

Ms. Carol Myers, Mathematics Consultant

Dr. MaryAnne Hall, Literacy Consultant

Other Project Reports

Videotape

An overview of this project is presented in "Workplace Literacy: A Challenge for the 1990's." This twenty-minute videotape presents a description of the program and interviews with key participants.

Curriculum

A detailed description of the literacy audit and development of the curriculum is presented in Hospital Job Skills Enhancement Program Curriculum. This document contains copies of curriculum units and assessment instruments used in the project.

These materials are available at cost from:

The Center for the Study of Adult Literacy
Georgia State University
Box 682, University Plaza
Atlanta, GA 30303.

HOSPITAL JOB SKILLS ENHANCEMENT PROGRAM:
A WORKPLACE LITERACY PROJECT
Executive Summary

The Center for the Study of Adult Literacy at Georgia State University, Atlanta was funded by the U.S. Department of Education to develop a Workplace Literacy Partnership Project with Grady Memorial Hospital in Atlanta. The program provided workplace literacy instruction for hospital workers in the housekeeping, laundry, and food service departments. Classes for workers were held twice per week for 36 weeks at the hospital on job time. Literacy was defined as reading, writing, oral communication, and problem-solving. Computation was not included as it was not an integral part of these workers' jobs.

The curriculum was developed using materials and information gathered during a job literacy audit. Targeted jobs included those presently held by entry level workers and jobs into which they might be considered for promotion. Workers were observed and interviewed on their jobs to determine the literacy demands of each job. Supervisors were also interviewed and all literacy materials pertinent to the job were collected. These data were then analyzed for literacy processes required from which specific literacy

instructional objectives were developed. The curriculum was planned to meet these literacy objectives using an integrated whole language approach. That is, reading, writing, oral communication, and problem solving were taught pragmatically through actual job materials and simulations. Generic materials applicable to all hospital employees (e.g., the personnel manual, paycheck stubs, insurance forms) were also used.

Instruction was provided by a full-time instructor who taught four classes, one part-time instructor who taught an additional 14-week class for front-line supervisors, and several volunteers. A total of 66 persons enrolled in the program. Participants were primarily black women (83%) with an average age of 43 years and an average of 10 1/2 years employment at the hospital. Average educational attainment was 11th grade, and many had high school diplomas. There was a 71% retention rate (persons completing at least one session and taking the pre- and post-tests) over the 9 months of instruction. Those who dropped out or did not re-enroll for additional sessions did so for job (40%), health (20%), or family (40%) reasons.

Students were assessed before and after instruction by a Cloze reading test using passages from job materials, a writing sample yielding a writing process score, and role playing a job situation scored for oral communication. Statistically significant gains were obtained for reading, writing, and oral communication. Oral communication scores were significantly related to class attendance, but reading and writing scores were not.

Participants and supervisors were interviewed at the end of the program and anecdotal notes kept throughout the program. These data were analyzed to determine the participants' assessment of the program and its effects on their personal and job attitudes and their job performance. Employees felt that participation in the hospital job skills enhancement program increased their academic skills (61%), improved their oral (39%) and written (34%) expression, improved their job knowledge (29%), increased their confidence (27%), and refreshed their basic education (24%). Participants mentioned their improved ability to express themselves to their supervisors and their increased confidence in oral communication on the job. They mentioned that they were better able to explain things. One participant used her new skills to request (and receive) a pay raise she felt she had been denied. Supervisors felt that the program benefited the workers, especially in oral expression. They saw limited, short-term differences in job performance (e.g., accepting and fulfilling responsibility for completing a task without being reminded).

The classes were held on job time which was both a positive and a negative. By holding classes on job time, literacy classes were perceived in the same category as job training classes (e.g., typing, medical terminology) also held on job time. However, if the supervisor was short workers on a shift or had extra work to do, workers were not allowed to leave their job to attend class. This resulted in a higher class absence rate (32%) than would have

been desired. Recruiting for the program was done within the departments targeted by the hospital's Director of Personnel. Workers volunteered to attend but actual selection of who could be "spared from the job" at each class time was made by worker's immediate supervisors. This resulted in some participants who wanted to attend being excluded and others (57%) being recruited by their supervisors.

Many participants (69%) indicated that their reason for attending the classes was to get a promotion or a better job. At the end of the program two had achieved this objective. One accepted a frontline supervisory position, another a position as an assistant nurse anesthetist. Several enrolled in job skills classes (typing, medical terminology) which might lead to better jobs.

Both the hospital and the literacy provider evaluated the program as successful noting improvement to individual employees as the primary result. Several hospital personnel indicated that they would like the program to continue stating that improvement to employee skills and attitudes had at least an indirect benefit for the hospital.

In a relatively short time the participants in this hospital workplace literacy project improved their literacy skills and developed more positive attitudes about themselves. Continued instruction over a longer period of time is necessary to help all the participants obtain their job and educational objectives.

Introduction

The Hospital Job Skills Enhancement Program was one of the U.S. Department of Education's Workplace Partnership Literacy Research and Dissemination Projects. These programs were funded to develop workers' literacy skills in order to increase job productivity and to provide new or continued employment or career advancement for employees. Thirty-seven projects were funded, each a partnership between a literacy research provider and an employer. The Center for the Study of Adult Literacy at Georgia State University was one of these grantees funded to develop a partnership project with Grady Memorial Hospital in Atlanta.

Rationale & Need for Workplace Literacy

If the needs of the U.S. business community are to be met in the year 2000, the literacy level of entry level workers must be raised significantly. Research on the development of the U.S. economy, demographics for the year 2000, and examination of the educational preparation of the present workforce show that there is a basic skills gap between the needs of business and the qualifications of entry level workers. In 1988 a survey by the United States Department of Education questioned 134 executives from both small and large businesses and found the need for more highly skilled employees (U.S. Departments of Labor, Education, & Commerce 1988). Two-thirds of these 134 employers assessed the

current pool of entry-level applicants as being insufficiently prepared in basic skills. In another survey, conducted by the United States Departments of Education and Labor, 101 executives from small and medium-sized businesses mentioned several competencies as being inadequate, including writing and the understanding of basic mathematical concepts (U.S. Departments of Labor, Education, & Commerce, 1988, p. 13). Furthermore, employers in both of these surveys were seeking qualities beyond the basic skills: flexibility, adaptability, communication, problem-solving, more highly developed listening skills, self-direction and initiative, and improved attitudes and work habits.

Changes in the economy present a major challenge to the education of the workforce, particularly in the South. In recent years the U.S. economy has moved from being primarily manufacturing-centered to service-centered. Estimates are that by 1995 90% of new jobs will be in services; 8% will be in manufacturing (U.S. Departments of Labor & Education, 1988, p.3). These economic trends will be especially challenging for the South because of educational deficits in the South and because of the South's reliance on those traditional, goods-producing industries which are undergoing structural changes (Mendel, 1988).

Mendel further states that data "strongly suggest that the workforce literacy problem in the South will be concentrated increasingly among high school dropouts with limited literacy skills" (Mendel, 1988, p. 11). Census figures from 1980 showed that 35.7% of Southern adults lacked high school credentials while

the figure for dropouts in the nation as a whole was 30.7%. By 1986 averages in the Southern states ranged from 22% to 38.5%, while the national average had improved to 28.5%. Ten of fourteen Southern states had more dropouts than the nation as a whole. In 1987 in Georgia, the Governor's Task Force on Literacy (1988) estimated that one-third of Georgia's adult population over 18 years of age (4.2 million persons) is illiterate. For the nation as a whole 15.3% of adults had 8 years of education or less; in the South 19.4% of adults had 8 years of education or less.

There are two reasons why workplace literacy programs are an important part of the solution to the problem of illiteracy. One reason is demographics: by the year 2000 the average age of the American worker will have increased to 39, far beyond the age for attending school (Hudson Institute, 1987). Twenty to 30 million adults with inadequate basic skills are already out of school (Chisman, 1989). Secondly, there is a "a lack of fit between basic skills instruction and employers' expressed needs. In basic skills instruction, content is secondary...and no attempt is made to explain how skills should be used in a strategic way to gain control over problem-solving processes" (Collino, Aderman, & Askov 1988,p. 7). According to the Final Report of the Project on Adult Literacy (Chisman, 1989), school reform will not solve the problem of adult literacy, nor will volunteers alone, nor business, nor technology. This report calls for partnerships composed of all of these groups to confront the problem of illiteracy. Further, Chisman holds that without abandoning efforts to help the

unemployed and other disadvantaged groups, "...we must build an emphasis on workforce literacy if the nation is to meet the economic and social challenges of the years to come" (1989, p.iv).

Workforce literacy, as defined by Philippi (1988a), focuses on improving job performance, promotion potential, and retention of employees by providing a curriculum based on job-specific reading, writing, and computation tasks. The purpose of a workforce literacy program is to enable participants to perform the basic skills applications which are used in the context of job task (Askov, Aderman, & Hemmelstein, 1989; Carnevale, Gainer, & Meltzer, 1988). Workplace applications of basic skills generic to many different occupations include:

"-job reading processes for locating information and for using higher level thinking strategies to problem solve;

-occupational writing processes for organizing clear, readable writing, and for mastering those thinking skills which enable analysis, elaboration, and extension of written ideas; -
workplace applications of mathematical processes for calculating information and solving problems that go beyond basic number concepts and computation skill drill and enable workers to acquire proficiency levels in reasoning and interpretation" (Philippi, 1988a, p.2).

A workforce literacy curriculum is designed by conducting a literacy audit with two purposes in mind: 1) to determine materials used on the job and the level of difficulty of those materials and 2) to identify aspects of job tasks which require

reading, writing and computational skills. This is done by observing employees as they perform tasks in the workplace and by gathering materials which "should simulate key basic skills and problem-solving tasks that workers face on the job" (Philippi, 1988a, p.4). Curriculum designers select materials that can be used intact, modified, or simulated to provide a vehicle for teaching basic skills as they are used on the job.

Workforce literacy programs are effective because there is a direct transfer of reading, writing, computation, and problem-solving skills to job performance (Sticht, 1975). In that respect workforce literacy programs are different from general skills development programs, from which there is limited generalization to work performance (Sticht, Fox, Hauke, & Zapf, 1977). The instruction is meaningful to employees because it is built on charts, manuals, and processes with which they are already familiar through work; they have the background information and cognitive structures from work and experience into which to incorporate new information. Thus, workplace literacy programs using job-related texts appear to be an effective means of addressing the high rate of illiteracy in America as well as meeting the needs of business and industry for the 21st century.

In 1988 the U.S. Department of Education funded 37 Workplace Literacy Partnership Projects to develop and evaluate model workplace literacy programs. The Hospital Job Skills Enhancement Program was one of these partnerships.

Purpose & Objectives of the Program

The Hospital Job Skills Enhancement Program was designed to provide literacy skills for housekeeping, food services, and laundry workers needed to perform effectively in their present jobs and to be eligible for consideration for promotion to other jobs. It was planned to improve their proficiency in reading, writing, oral communication, computation, and problem-solving skills used on the job. It was anticipated that their attitudes, attendance, and job performance would also be positively affected. Because this was a research and dissemination project, the development of dissemination materials was also included.

The goals of the project were:

1. to increase the basic literacy (reading, writing, and computation) of employees relative to their current job requirements and/or the requirements for job advancement.

2. to increase the problem-solving and oral communication skills of employees relative to their current job requirements and/or requirements for job advancement.

3. to relate the employees' improving literacy skills to improved productivity on the job.

4. to prepare dissemination materials describing the process of job analysis and preparation of job-related literacy instructional and assessment materials needed for workplace literacy projects.

The specific objectives of the project were:

1. to assist entry-level food service, housekeeping, and laundry employees at Grady Memorial Hospital to gain literacy, problem-solving, oral communication, and basic computational skills needed to be considered for promotion to a first-level supervisory position.

2. to instruct these employees to read and understand relevant hospital and department policies in order to effectively implement them and to read menus, diets, and food preparation and cleaning instructions.

3. to instruct these employees to write weekly Quality Assurance Reports required of supervisors, to prepare written schedules, to write orders, and to maintain written employee records and evaluations.

4. to instruct these employees to communicate effectively with the hospital staff and with the housekeeping/food service employees whom they would train and supervise.

5. to instruct these employees to use problem-solving techniques to plan and supervise the work required to achieve the established cleaning/food service standards within the personnel and budgetary constraints of the hospital.

6. to instruct these employees in basic computational skills required to prepare time schedules, maintain inventory control, estimate required quantities of food supplies and equipment, and maintain budget control.

Description of the Program

The Workplace

Grady Memorial Hospital was founded in 1892 as a charity hospital. It is now operated by the Hospital Authority of Fulton and DeKalb Counties and serves as a teaching hospital for Emory University and Morehouse College Medical Schools. Over 20% of Georgia's residents are served at Grady through emergency clinics, outpatient facilities, and the 900-bed hospital in the central city. In planning the partnership project, the Director of Personnel and his staff identified three departments in which employees would be likely to benefit from workplace literacy instruction. These departments employ large numbers of entry level workers who are hired without regard to literacy or educational qualifications. However, jobs into which the workers might be promoted, e.g., front-line supervisor, have specific educational qualifications (high school diploma or the equivalent). Some workers lack the educational qualifications; others lack the literacy skills even if they have the educational qualifications. Many workers find themselves trapped in entry level positions and remain in these jobs for many years. In several instances supervisors have noted high quality performance by these workers, but are unable to reward this performance due to the worker's literacy levels and/or lack of credentials. Therefore, the hospital administration was enthusiastic about the possibilities of the partnership program.

Recruitment

Recruitment of participants was a collaborative effort. Information about the program was presented to workers by the hospital staff through the supervisors in the three departments, the workers' front-line supervisors, and the training staff. Fliers were prepared, notices put in the hospital newsletter, and presentations made at departmental meetings by the instructor. The instructor also made many personal contacts talking with workers about the program and encouraged their participation. The fact that the program was on job time and at the work site was an incentive to participate. Employees volunteered to participate in the program, but their immediate supervisors made the final selection of who was to attend. The reason for this was the necessity to be certain that the work was covered while the employee was gone. Supervisors also selected employees whose performance they wanted to reward by time off to participate in this program.

Instructional Program

The first three months of the project were devoted to a literacy task analysis (literacy audit) of the targeted jobs. The information collected in this analysis was the basis for developing the curriculum to be taught in the classes. A brief description of this process is presented below. Following the literacy audit, a curriculum was developed and taught to classes for workers and supervisors during a nine-month instructional program. Students were assessed on reading, writing, and oral communication skills

before and after instruction. Assessment instruments were also developed from workplace materials.

Classes for workers were held twice per week for 1 1/2 hours each on job time at the hospital on days least affected by the hospital's complex rotation off (RO) schedule, a factor of the 24-hour per day, 7-day per week operation of a hospital. Times were selected to be the least disruptive of work in the participating departments. Only a few employees from each department were released to attend each class session with the result that classes were heterogeneous across departments and skills levels.

The program was divided into six sessions of six-weeks each. Participants were encouraged to attend all six of the sessions or all remaining sessions if they entered after the first session. There was one full-time instructor who also participated in student recruitment and curriculum development. She taught the four classes for workers. Volunteers and two graduate students supplemented the instruction in these classes. A part-time instructor was added to teach the class for front-line supervisors held for two sessions (one for eight weeks, the second for six weeks, two hours per week).

Participants

A total of 66 persons enrolled in the program (classes for workers and supervisors). Participants were primarily black women (83%) with an average age of 43 years and an average of 10 1/2 years employment at the hospital. Average educational attainment was 11th grade; 58% of the participants had high school diplomas.

Table 1 presents a demographic description of the participants who completed at least one session of the program.

Retention

The efforts undertaken to publicize the program and to recruit workers to attend classes yielded enthusiasm and interest on the part of many hospital employees. Probelems occurred, however, in releasing them from the job to attend class. If a supervisor felt there was a shortage of workers to do a job that day, workers were not allowed to attend class. This resulted in a class attendance rate of only 68%. There also were some seasonal problems with class attendance, for example during vacation periods or when doctors entering the residency program began work. Participation ranged from one to six sessions with 40% of the students attending four, five, or six sessions. Thirty per cent of the students attended only one session. Overall, however, once participants began the program, they stayed with it. Retention rate (defined as completing at least one session and taking the pre- and post-tests) was 71%.

Literacy Audit and Curriculum Development

The targeted jobs were audited for their literacy demands. These processes formed the basis for the curriculum used in this project.

Table 1

Demographic Data

Variable	M	SD	N	Range
Age	43.36	11.49	55	19-65
Grade Completed	11.15	1.98	54	3-16
Years Worked	10.49	6.91	55	1-25
Gender*	1.16	0.37	55	1-2
Race**	1.00	0.00	55	1-1

*Female = 1, Male = 2

**Black = 1

Curriculum Development

The Hospital Job Skills Enhancement Program used actual workplace literacy materials and emphasized the skills needed on the job. These materials demand that the worker integrate oral communication (speaking and listening), reading, writing, and problem-solving. This integrated, whole language approach also was the basis for the curriculum developed for this project. The literacy curriculum utilized real materials from the hospital and provided instruction and practice in actual literacy skills needed on the job. Assessment instruments were also based on job texts and skills.

In order to develop this curriculum it was necessary to conduct a literacy audit of the targeted hospital jobs (Philippi, 1988b), collecting examples of the texts used and observing the literacy processes employed by experienced workers. Also collected were texts generic to the workplace likely to be read by all employees such as the employee personnel handbook, the hospital directory (Yellow Pages), and pay stubs. The audit was conducted by staff members of the Center for the Study of Adult Literacy (CSAL) who interviewed employees and supervisors, observed workers on the job, and collected relevant literacy materials. The data and artifacts from this audit were then analyzed for literacy processes involved. These literacy processes formed the objectives for the curriculum. Table 2 outlines a sample of this process.

Table 2

Literacy Analysis and Objectives

The following gives an example of how the literacy demands of one job were analyzed and the literacy objectives developed.

Job Task	Literacy Objectives
Follow Needle Disposal Policy (attached)	
1. Check all needle containers in your assigned area. Seal the opening when container is filled to the appropriate level, "Do Not Fill Above This Level."	1. To summarize information read. To paraphrase information read. To figure out word meanings in context. To use the dictionary to find out word meanings.
2. To seal, follow steps 3a-3c.	2. To comprehend sequence of specific steps. To summarize information read. To paraphrase information read. To figure out word meanings in context. To use the dictionary to find out word meanings.
3. Disposal & Replacement of Sealed Needle Container. Follow steps B1-B2 and C1-C3.	3. To comprehend sequence of specific steps. To summarize information read. To paraphrase information read. To figure out word meanings from context. To usethe dictionary to find out word meanings.
4. Cautions regarding over-filled containers.	4. To summarize information read. To paraphrase information read To figure out word meanings in context. To use the dictionary to find out word meanings.

Table 2, continued

NEEDLE DISPOSAL POLICY

Purpose: To establish a procedure that will outline the appropriate steps to take for the disposal of needle containers.

Procedures: Step by Step

A. Sealing the Opening on the Needle Container

Step 1 - Check all needle containers in your assigned work area on a daily basis.

Step 2 - On each needle container you will see lettering that will state, "Do Not Fill Above This Level." This statement is located on the front side of the needle container, approximately 2 inches from the top. When checking the needle containers, you will see an opening on the top right hand side. to determine when the needle container is filled to the appropriate level, you will look inside the opening, then look on the front of the needle container to locate the statement, "Do Not Fill Above This Level." When you see that the contents inside the needle container has reached this level, it is time to seal the opening.

Step 3 - To seal the opening on the top right hand side of the needle container, you will take the following steps to safely accomplish this task:

a. On the top left hand side of the needle container you will see a red cap. You will remove this cap and proceed to the next step.

b. To seal the opening, there are four slots located around the opening. The red cap has four extensions that fit into these slots. Take the red cap and align the extensions to fit into the four slots and press the top into these slots.

c. The needle container is sealed and ready for disposal.

B. Disposal of Sealed Needle Container

Step 1 - Once the needle container opening has been sealed, the next step is to remove the security lock.

Step 2 - Once the security lock has been removed, remove the sealed needle container from the brackets and carry to the nearest bio-hazardous barrel for disposal.

C. Replacing Needle Container

Step 1 - A new needle container is composed of two parts. There is a top and bottom piece. Before you place a new needle container into the wall brackets, the top piece must be placed on the bottom piece. In order to accomplish this task, the bottom piece, with the yellow lettering facing you, should be placed on a horizontal surface. The top piece will be placed on the bottom piece, with the opening on the right hand side. There are eight slots on the top piece and eight extensions on the bottom piece. The top piece slots must be aligned with the bottom extensions. When this is accomplished, press firmly on all sides to secure the top to the bottom.

Step 2 - Once the top has been secured to the bottom, place the needle container in the wall brackets, making sure that the yellow lettering is facing you.

Step 3 - Secure the needle container by placing the security lock into the wall bracket and locking the security lock.

* Over-Filled or Improperly Filled Needle Disposal Containers

Should an employee encounter a needle container that is over-filled or improperly filled, the employee is to contact their immediate supervisor or in their absence, the shift manager.

Under no circumstances should the employee try to seal the opening on the needle container when it is over-filled or improperly filled.

It will be the responsibility of the immediate supervisor or the shift manager to seal the opening on the needle container should this situation occur.

To repeat, under no circumstances should an employee try to seal the opening on the needle container when it is over-filled or improperly filled.

After the literacy objectives were developed, integrated units of instruction were planned for each of the six sessions and lesson plans were developed for each class period. Instruction included whole group, small group, and individual activities integrating oral communication and problem solving, reading and writing. Instruction was also planned in computation; however, during the literacy audit it was found that the targeted jobs required almost no computation. Therefore, computation was not assessed and was included in instruction only incidentally. By using actual hospital texts, participants were familiar with the content from their jobs. Thus, they brought to the literacy task background knowledge about the subject and a contextual schema which could be applied to comprehension of the oral and written texts. Within each text, specific literacy skills were selected for instruction and application. For example, a lesson on mopping the floor was used to teach sequencing information; a lesson from the personnel handbook presented new vocabulary and concepts (e.g., benefits, balance). Instruction also emphasized the participants' self concepts as learners and workers. Each session included discussion about and encouragement to express oneself on the job and to feel positively about oneself as a learner. The language experience approach, role playing job scenarios, and pragmatic writing were frequently used instructional techniques. Appendix A presents the curriculum outline for the workers' and supervisors' classes.

Instructional Implementation

Classes for the entry-level workers were arranged at four times to accommodate the work demands of the hospital. The same lesson plans were used for each class, but the classes varied somewhat in composition and in number of volunteers available.

Each of the objectives for the project was assessed by appropriate quantitative and/or qualitative data analysis. Participants were assessed by reading, writing, and oral communication pre- and post-tests developed from workplace texts and situations. Attendance records were reviewed for job attendance during the class sessions and a comparable period prior to and three months after class. Demographic and class attendance data were collected. Interviews were held with participants and their supervisors following instruction. Anecdotal notes from classes and records of the literacy audit and curriculum development process were also collected.

Literacy Assessment

The reading tests were 20-item modified Cloze tests based upon information in the employee handbook and job memos applicable to all departments. For the workers' writing assessment, the participants wrote an essay about "My Story," their lives at Grady Hospital. For the supervisor's writing assessment, the participants wrote a hypothetical complaint against someone explaining the complaint and the action they would like to have taken. The writing post-test asked the participants to write an essay on what job they would like to have at Grady, whether they

planned to apply for it, and why or why not? Both essays were scored using a holistic scoring guide assessing written communication, not the mechanics (see Appendix B). The oral communication pre-test was a role playing dialogue between two participants. One took the role of employee asking for time off work and the other took the role of the supervisor. They then switched roles. The post-test was an interview with the graduate research assistant asking their assessment of the classes. Both measures were scored by a communicative scoring guide assessing the form of the communication, not the mechanics nor the content (see Appendix C).

The reading, writing, and oral communication assessment measures were all based on actual workplace texts and scenarios, thus assuring their content validity for this job skills literacy program. The curriculum was developed on an integrated, whole language model. By using integrated measures (rather than discrete point measures), the construct validity of the assessment measures was also assured. The reliability of the reading test was assessed by a split-half correlation coefficient corrected for length. A correlation of .897 was obtained for the 20-item test. The writing sample was scored independently by two trained raters. They obtained a 57% interrater agreement initially and an 83% agreement after further training. All papers were scored by both raters independently. They then conferred and negotiated a score for any papers on which they disagreed. Data analysis was completed on this negotiated score. The oral communication assessments were

scored by one trained rater. A random sample (12%) were rescored by a second independent trained rater. An 86% interrater agreement was obtained.

Data on both pre- and post-tests were obtained for 39 participants and were analyzed by *t*-tests. Descriptive statistics are presented in Table 3 and *t*-tests in Table 4. Significant gains were made in reading, writing, and oral communication by the total group of workers. Significant gains were made in oral communication by two of the individual class sections (8:30 & 10:30 a.m.), but not by the other two class sections or in reading and writing (see Table 5 for *t*-tests for individual classes). The total group of workers was divided into high, middle, low groups by pretest score. Gain scores were calculated and analyzed by analysis of variance. Results are presented in Table 6. The low and middle groups gained significantly more than the high group in reading and oral communication indicating that the program was most beneficial for the lowest level students. One reason the high group did not show significant gains may have been that there was a ceiling effect on the test. The maximum score on the reading test was 20, and the high group's mean score on the pretest was 18.5.

There were significant correlations among several of the variables for the workers (see Table 7). Age was inversely related

Table 3
Literacy Test Descriptive Data

	All Classes			8:30 Class			10:30 Class			1:30 Class			3:30 Class			Supervisors Class			
Test	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	MAX
Reading Pre-test	13.94	4.74	54	14.29	3.99	7	13.57	4.59	14	14.38	5.51	16	12.60	3.51	5	14.17	5.25	12	20
Reading Post-test	14.81	3.46	47	14.71	3.82	7	14.00	3.93	12	15.47	3.40	15	15.00	2.35	5	14.75	3.69	8	20
Writing Pre-test	3.81	0.89	42	3.86	0.69	7	3.79	0.98	14	3.63	0.96	16	4.40	0.55	5	--	--	-	6
Writing Post-test	4.24	0.97	38	3.86	0.69	7	4.00	1.08	13	4.46	1.05	13	4.80	0.45	5	--	--	-	6
Oral Communi-cation Pre-test	26.23	3.74	53	25.57	3.99	7	26.00	3.22	13	24.81	2.69	16	24.00	5.34	5	29.67	2.71	12	35
Oral Communi-cation Post-test	28.40	3.81	35	29.50	2.81	6	29.91	3.81	11	26.39	4.19	13	29.00	1.58	5	--	--	-	35

Table 4

Pre- and Post-assessment t-Tests: Total Workers' Classes

Reading	M	SD	N	t	p
Pre-test	13.79	4.67	39		
				-2.24	0.031
Post-test	14.82	3.46	39		
Writing					
Pre-test	3.84	0.92	38		
				-2.43	0.020
Post-test	4.24	0.16	38		
Oral Communi-cation					
Pre-test	25.12	3.55	34		
				-4.41	0.000
Post-test	28.29	0.65	34		

Table 5

Pre- and Post-assessment t-Tests: By Individual Class for Workers

	M	SD	N	t	p	M	SD	N	t	p
Reading			8:30 AM					10:30 AM		
Pre-test	14.29	3.99	7	-0.41	0.695	13.50	4.50	12	-0.92	0.377
Post-test	14.71	3.82	7			14.00	3.93	12		
Reading			1:30 PM					3:30 PM		
Pre-test	14.20	5.66	15	-1.36	0.194	12.60	3.51	5	-1.99	0.118
Post-test	15.47	3.40	15			15.00	2.35	5		
Writing			8:30 AM					10:30 AM		
Pre-test	3.86	0.69	7	0.00	1.00	3.77	1.01	13	-1.00	0.337
Post-test	3.86	0.69	7			4.00	1.08	13		
Writing			1:30 PM					3:30 PM		
Pre-test	3.69	1.03	13	-2.03	0.065	4.40	0.55	5	-1.63	0.178
Post-test	4.46	1.05	13			4.80	0.45	5		
Oral Communi-cation			8:30 AM					10:30 AM		
Pre-test	26.33	3.78	6	-3.12	0.026	26.10	3.51	10	-2.88	0.018
Post-test	29.50	2.81	6			29.70	3.95	10		
Oral Communi-cation			1:30 PM					3:30 PM		
Pre-test	24.23	2.65	13	-1.70	0.114	24.00	5.34	5	-1.96	0.12
Post-test	26.38	4.19	13			29.00	1.58	5		

Table 6

Analyses of Variance of Pre-and Post-assessment Gain Scores

Reading Pre-test	SS	DF	MS	F	p
Class	14.598	3	4.866	.212	.888
Residual	873.807	38	22.995		
Total	888.405	41	21.668		
Reading Post-test	**SS**	**DF**	**MS**	**F**	**p**
Class	14.582	3	4.861	.386	.764
Residual	441.162	35	12.605		
Total	455.744	38	11.993		
Writing Pre-test	**SS**	**DF**	**MS**	**F**	**p**
Class	2.312	3	.771	.971	.417
Residual	30.164	38	.794		
Total	32.476	41	.792		
Writing Post-test	**SS**	**DF**	**MS**	**F**	**p**
Class	3.981	3	1.327	1.461	.243
Residual	30.888	34	.908		
Total	34.868	37	.942		
Oral Communi-cation Pre-test	**SS**	**DF**	**MS**	**F**	**p**
Class	18.873	3	6.291	.526	.667
Residual	442.152	37	11.950		
Total	461.024	40	11.526		

Table 6, continued

Oral Communication Post-test	SS	DF	MS	F	p
Class	86.914	3	28.971	2.215	.106
Residual	405.486	31	13.080		
Total	492.400	34	14.482		

Table 7

Significant Intercorrelations of Variables: Workers (N=55)

	Grade	Years Worked	Pre-Reading	Post-Reading	Pre-Writing	Post-Writing	Pre-Oral	Post-Oral	Reason	Job Objective	Class Attendance
Age	-.35**	.58***	N.S.	-.28*	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Grade		N.S.	.49**	.59***	N.S.	N.S.	.33**	N.S.	.31**	N.S.	N.S.
Years Worked		N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	.27*	N.S.	N.S.
Pre-Reading			.79***	.36**	.43**	.26*	N.S.	N.S.	N.S.	N.S.	.24*
Post-Reading				.50***	.58***	.34**	.29*	N.S.	N.S.	N.S.	N.S.
Pre-Writing						.44**	N.S.	N.S.	N.S.	N.S.	N.S.
Post-Writing						N.S.	.43**	N.S.	N.S.	N.S.	N.S.
Pre-Oral Communication							.35*	.30*	N.S.	N.S.	N.S.
Post-Oral Communication								N.S.	N.S.	N.S.	N.S.
Reason for Attending										.48**	N.S.
Job Objective											N.S.

*p <.05
**p <.01
***p <.001
N.S.= not significant

to grade level completed and post-reading score and positively related to number of years worked. Grade level completed was related to pre- and post-reading and pre-oral communication scores and to the reason for coming to class (to learn to read and to get a better job). Number of years worked at Grady was related to the person's objective in taking the course (to get a better job and to obtain higher education). Pre- and post-oral communication scores were related to class attendance. Significant intercorrelations were obtained among the following literacy variables:

pre-reading and post-reading,
pre-writing and post-writing,
pre-oral communication and post-oral communication,
pre-reading and pre-writing,
pre-reading and post-writing,
pre-reading and pre-oral communication,
post-reading and pre-writing,
post-reading and post-writing,
post-reading and pre-oral communication,
post-reading and post-oral communication,
post-writing and post-oral communication.

Significant intercorrelations were <u>not</u> obtained for:

pre-reading and post-oral communication,
pre-writing and pre-oral communication,
pre-writing and post-oral communication,
post-writing and pre-oral communication.

Oral communication scores were significantly related to class attendance, but reading and writing scores were not.

The supervisors' class was held for two sessions only and used a curriculum based upon their work demands. They were given pre- and post-reading Cloze tests which showed a significant gain in reading (see Table 8). The number of supervisors completing the

Table 8

Pre- and Post-Assessment t-Test: Supervisors' Class

Reading	M	SD	N	t	p
Pre-test	12.25	5.34			
			8	-3.12	0.017
Post-test	14.75	3.69			

writing and oral communication post-tests was too small to analyze. Significant intercorrelations were found for the supervisors class also (see Table 9). Age was inversely related to grade level completed and positively related to years worked at Grady. Grade level completed was inversely related to years worked at Grady. Wanting to get a better job or a higher education was related to age and years worked at Grady, while feeling satisfied with the current job was related to grade level completed and pre-reading test score. Pre-reading test scores were positively related to grade completed, class attendance, and post-reading score. Reason for attending class (asked to by their supervisor, to see the program their workers were attending, to improve on the job) and class attendance were related.

Participants in the classes were rated by the instructional staff on their motivation to improve their literacy skills on a three-point scale (highly motivated, average motivation, poorly motivated). Motivation rating was correlated with class attendance and a positive relationship was found (r = .30, p = .026) for workers, but not for supervisors (r = -.04, p = .452).

Summary of Literacy Assessment in Relation to Program Objectives

Statistical analyses of the data indicate that participants gained in racy skills (reading, writing, and oral communication) by participation ıis program. Class attendance was affected by motivation to improve and ırn affected improvement in oral communication. Thus, four of the

Table 9

Significant Intercorrelations of Variables: Supervisors (N=13)

Class	Grade	Years Worked	Pre-Reading	Post-Reading	Pre-Oral	Reason	Job Objective	Attendance
Age	-.59*	-.61*	.55*	N.S.	N.S.	N.S.	.55*	N.S.
Grade		N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Years Worked			N.S.	N.S.	N.S.	N.S.	.61*	N.S.
Pre-Reading				.84**	N.S.	N.S.	.66*	.63**
Post-Reading					N.S.	N.S.	N.S.	N.S.
Pre-Oral Communication						N.S.	N.S.	N.S.
Reason for Attending							N.S.	.55*
Job Objective								

* $p<.05$
** $p<.01$
*** $p<.001$
N.S. = not significant

specific instructional objectives were achieved in that the employees in the targeted departments improved in job-related reading, writing, oral communication, and problem-solving skills needed to be considered for promotion to front-line supervisory positions. The only objective not obtained related to computation which was not taught or assessed because it was found in the literacy audit not to be a skill used in the targeted jobs.

Other Outcomes

In order to obtain information about the effects of the project on workers' attitudes, self-assessment, motivation, and participation, anecdotal notes were kept on class sessions. Participants were also interviewed at the end of the program. A description of the class sessions and the participants' attitudes and responses has been developed from these notes by Judy Hiles, a graduate research assistant who served as a tutor and who interviewed the participants. The description of the supervisors class has been developed from notes prepared by Carol Bartlett, part-time instructor for that class.

Workers' Classes

Of the nine individuals who entered the Hospital Job Skills Enhancement Program (HJSEP) workplace literacy class at 10:30 A.M. on January 24, 1989, there were six women and three men, all of African-American origin. Five worked in the Housekeeping Department and four in the Laundry. Their length of service to the hospital ranged from one year to 25 years, with the average stay being 14 years, 8 months. One man, a floor stripper who reported

having a second grade education, stayed in class only one day. Of the eight remaining, two were men in their twenties, two were women in their thirties, two in their forties, and two in their fifties. Their ages ranged from 24 years to 55 years. Two reported having had a tenth grade education; six had finished high school. Asked to state their reasons for taking the class, five mentioned wanting to better themselves and/or to move to a better job; three expressed a desire to learn to express themselves better orally.

One of these six, a 26-year old man named James*, had spent part of a year in junior college. He dropped out of the junior college because his grades were poor ("I played a lot of video games"). He took a job as an assistant in the hospital laundry in order to save money for returning to school.

When he entered the HJSEP program, James stated that his long-range goal was to be a civil engineer; for the short range he wanted to learn "to give oral instructions to those who need to know what to do on the job and to answer questions effectively." After attending two sessions of class, James announced that he was dropping the class because it seemed that it was not going to meet his needs. He told Sarah, one of the older women in the class, that he felt HJSEP was for people who did not have a high school diploma or GED. She replied that she thought it would help him with speaking in front of a group, and he would need that skill in college. The instructor also paid a visit to James, who

* Pseudonyms are used throughout this section.

subsequently returned to class and finished the six-week session. In an interview held after he finished class, James was asked whether he had changed in any way as a result of taking the class. He replied, "Yes, I have been able to express myself orally much better. I have changed in asking my manager questions. Instead of saying, 'May I ask you a question?', I now say, 'I have a question to ask you,' which is more straightforward."

Sarah, the older woman mentioned above, gave a similar report in her exit interview. She said, "I learned how to communicate better and how to make decisions." Sarah is 50 years old, with 25 years of service to the hospital. A sewing room assistant, she stayed in HJSEP for nine weeks, until extra work in the sewing room forced her to stop coming to class. During the time she was enrolled in HJSEP, the job of supervisor in the sewing room came open. The manager encouraged Sarah to take the position. Initially, she refused: "I didn't think I could boss people who had been my co-workers." She reported that her children said, "Take it, Mama, take it!" After some thought she accepted the job, and was soon compelled to use her oral skills because the promised pay raise had not come through several weeks after she began to carry the added responsibilities. Twice Sarah called the manager who had offered her the job. When he put her off the second time, she called his superior, a Mr. Johnson, to ask for his help in obtaining her raise. Sarah's manager then verbally reprimanded her

for "going over my head". "You just want me to dance to your tune," he said. Sarah replied, "No, I just want what's coming to me." Sarah got her raise.

An account of a day in class explains why Sarah and James developed effective oral communication skills in such a short time. (Over a nine-week period, Sarah had been in class a total of 24 hours; James had been in class even less, a total of 15 hours over a six-week period.) Much oral discussion was intentionally included in each class period and preceded written work. The instructor, Kaleya, encouraged students to improve their presentation skills. She spoke with the students as they entered the room, moving from casual personal remarks into the subject matter of the lesson, which for four days centered around the Hospital Yellow Pages, an information sheet covering such topics as the Employee Credit Union, check-cashing policies, Lost and Found, and many others of interest to all employees. Kaleya distributed copies of the Yellow Pages to all members of the class. Individuals volunteered to read sections aloud. There was general discussion about the accuracy of the information given in the Yellow Pages. Kaleya encouraged the class members to respond without raising their hands, to look at one another when speaking, and to speak with confidence. "Claim your voice," was a frequent instruction. "You all have important information to share, and we want to hear it."

After ten minutes of reading and discussion, Kaleya called attention to some instructions which she had written on the

blackboard:

1. Choose a partner.

2. Look over your Yellow Pages.

3. Select one topic to discuss.

4. With your partner, list the steps needed for the topic chosen, adding and correcting information as necessary.

5. Be prepared to dictate the steps so they can be put on the board.

The class members chose their close co-workers as partners: Sarah and Annie T., both from Laundry, sat together; Marilyn and Betsy, both from Personnel Quarters Housekeeping, constituted the third pair; James was left to work on his own, as the other male member of the class was absent. Kaleya circulated among the partners, saying, "Use your notes from last week. Remember all the hidden steps."

When the class reconvened, Kaleya asked Marilyn and Betsy to go first. They had chosen the Employee Health Clinic as their topic. As soon as they began their explanation, Letitia and Virginia began interrupting because they had chosen the same topic. Kaleya listened carefully, affirming the importance of each contribution and encouraging the exchange of information among the four women. It became apparent that procedures for getting admitted to the Employee Health Clinic had changed over the years; class members had different information, depending on when they had last used the Clinic. The list of steps was written on the board and revised several times, ending with the following, which all

class members were instructed to copy into their notebooks:

1. Get a clinic form from your supervisor.

2. The supervisor fills out the form.

3. The form is white, with "Employee Health Clinic" written at the top.

4. The supervisor writes your name, time, hours you work, department you work in, telephone number, hospital number, date.

5. Go to 15C, Employee Health Clinic.

6. Go to clerk desk; present card and form to her.

7. Clerk stamps two sheets of paper, one for vital signs; one for demographics.

8. Employee takes form to triage room.

Kaleya listed two words on the board under the heading "unfamiliar": dictate and triage. "Learn to spell these by the end of the week, " she said. Then, "I really admire the way you have DETAILED this. Even if my reading ability were limited, you have given me such rich detail that I could get through this process."

Other hospital processes were discussed and written about during Session 1: "Obtaining the Employee Identification Card" and "Filling Out the Vacation Request Form." James reviewed the Yellow Pages article on the latter and gave an oral presentation standing before the class. Two class periods were spent on a work-related problem-solving scenario: "Imagine that you are a supervisor in your Department. On the day of inspection by the Hospital

Commission, two of your employees call in sick. What action would you take?" A lively discussion of alternatives ensued, with every class member discovering at least one course of action not considered before. Kaleya affirmed them: "You all bring a lot of information to this situation. For homework I want you to write up what you see as the solutions you would consider and how you would go about implementing them."

Class members responded to Kaleya's positive reinforcement by talking more and more. Their behavior showed that they were enjoying the class and that they were interested in and stimulated by the materials of the workplace literacy program and by Kaleya's presentation of those materials. They responded to her frequent use of humor with humor of their own. Even the more reticent students began to respond without being called upon. A report came from the laundry supervisor that Annie T. was now talking to people on the job. Annie had a history of working alone in silence. Several months later this same supervisor mentioned again this change in Annie's personal style. "Sometimes now she talks too much!" In her exit interview, Annie said, "I'm reading a little better, writing a little better, communicating better with other people. I have improved a lot in my speech."

The consistent use of partnering, humor by both instructor and students, and some form of positive reinforcement by Kaleya at least twice per class session were salient features of the 10:30 A.M. class during the entire six-week session. All of these factors seemed to contribute to cohesiveness in the group and

esprit de corps which is reflected in comments made in exit interviews: "I like the teacher. I may come back to class." (Annie). "Our supervisor asked us what we were doing in class. We told him, 'We like the class. We like Kaleya.'" (Sarah) "I learned how to go on a job interview...what to expect...how to approach other people." (Virginia)

Of the eight members of the 10:30 A.M. class, three signed up for a second session of classes. James did not, because he was preparing to apply for college. Letitia and Virginia had assumed that their supervisor would not allow them to enroll for another six-week session, so they did not attempt to do so even though they both stated in post-interviews that they had benefited from the classes in many ways. William, James' young co-worker in the Laundry, said that he would return for another session in the summer and that working with the people in the class "made it all seem worthwhile." (He did not re-enroll.) Marilyn was preoccupied with taking one of the Hospital's regular training classes, "Medical Terminology." (In this course, Marilyn learned 750 words and roots, made the second highest grade on the final exam, and credited HJSEP with teaching her how to study.) Betsy, Sarah, and Annie T. all continued in the 10:30 A.M. class. Midway through Session 3 Marilyn returned to HJSEP, but she enrolled in the 1:30 P.M. class.

The second six-week HJSEP session began much like the first, with two days taken up by assessment and informal "getting on board" conversation. Sarah facilitated the assimilation of two

new class members by sharing what she had learned in Session 1: "to make decisions, deal with people and responsibilities, and be myself!" The writing sample obtained from all students in all HJSEP sessions also helped class members get acquainted. Each person was instructed to write a paragraph or two including the following:

1. Where are you from?
2. Who are the members of your family?
3. What are some things you enjoy doing?
4. Describe your work at Grady.

As in Session 1, the content of Session 2 classes focused on reading the informational text of the workplace. In addition to the Yellow Pages Kaleya used a check stub (supplied by a class member) and a Hospital memo as subjects for lessons. A tutor with an accounting background explained and answered questions about pay periods and all the deductions shown, such as FICA, Federal Income Tax, State Tax, and Credit Union Contributions. Class members shared information about sick time and the difficulty of keeping up with overtime and holidays used or not used. One employee stated at the beginning of class that she thought the hospital was "shorting" her, but after the tutor's explanation that there are really 4.3 weeks in a month, and that three times per year employees receive three paychecks instead of just two, she realized that she was being paid correctly. Others expressed the desire to sharpen their math skills and keep their personal checkbooks in good order. A writing assignment was made which included some

mathematical manipulation: "Compose a letter to your supervisor stating that you have been offered a job for $17.50 per hour and that you will take that job because it means $X more for you over a year's time." The finished letters were brought in to the next class, shared with much glee and humor, and eventually word-processed for inclusion in the instructional files of class members.

About half way through Session 2, as the 10:30 A.M. class was flourishing and another, larger class was also flourishing at 1:30 P.M., an influx of additional students prompted the addition of classes at 8:30 A.M. and 3 P.M. Once assessment was completed, the same topics were treated in the new classes as in the established classes. In Sessions 3 and 4, the focus shifted to reading procedural documents of the workplace: the Hospital Personnel Manual, Benefits Packet, and a booklet constructed specifically for HJSEP, "The Method of the Week." The latter was based on written communications coming regularly from Housekeeping management to Housekeeping employees. The communications detailed such procedures as "Dust Mopping Patient Rooms," "Damp Mopping Corridors," and "Daily Vacuuming." Several activities were structured around each section: before reading, during reading, and after reading. There was much more emphasis in these later sessions on understanding what you are reading and on writing. The first pre-reading activity in the Method of the Week booklet yielded a particularly rich set of student themes. The assignment said:

1. Have you ever tried to explain to someone how to complete a task or chore?

2. Have you ever tried to teach someone to do something?

3. What did you teach them?

4. How did you teach them?

5. Did they follow your directions?

6. Did they make mistakes?

Write a description of your experience explaining to someone how to complete a task or chore.

Marilyn, who had re-enrolled by this time, recounted her efforts to teach her daughter how to "Warm Up House Plants," i.e., move them outside in the spring (the account ended with most of the plants coming back to Marilyn's to live!). Janet, who was not reading when she came to HJSEP at the beginning of Session 2, dictated a recipe for buttermilk pie, read it with her tutor, and then read it aloud to the class.

As the 1:30 P.M. class gained momentum, the 10:30 A.M. class was beginning to dissolve. Class members gave various reasons for missing class: "We are short at work" was the reason given by both Betsy and Annie T. Annie's supervisor later confirmed that whenever a Laundry employee left for class, the shift had to be reorganized so that the employee's job was covered while she or he was gone. The Laundry is under pressure to produce 6,000 clean and ironed sheets per day, plus uniforms and other items. There is an absolute number of employees without whom the

department cannot operate, so when an employee who might cover for others was on vacation or ill, no one could go to class.

Work pressure was also Sarah's reason for dropping out in the middle of Session 2. The sewing room had received hundreds of new uniforms, which had to be hemmed and altered for hospital staff. Sarah expressed the desire to return to class in the summer, when the rush was over, but she did not in fact return. Karen, a Housekeeping group leader who had been a stalwart of the 1:30 P.M. class during Session 1 and then had moved into the 10:30 A.M. class for Sessions 2 and 3, began to feel overwhelmed by the health problems of two of her seven children. As a result, she stopped coming to HJSEP. A grown daughter living with Karen had several surgeries during the last four sessions of HJSEP and also had to undergo kidney dialysis periodically. "With all that on my mind," said Karen, "I couldn't concentrate on my homework."

These four older women had functioned as leaders in the 10:30 class, and with their departure, a certain energy and enthusiasm also departed from the group. Three of the four newcomers never seemed to get invested in the program, and the fourth dropped out because she already held a high school diploma and felt she "had already learned everything that was being taught."

Midway through Session 2, however, two new classes were established which did have energy and enthusiasm for learning "what was being taught." Four women and one man became regular attendees of the 8:30 A.M. class, and the 3 P.M. class had the same number of students. All eight women remained in HJSEP through the end of

Session 6; one man took a job at a location outside the hospital, and the second man gave family/personal reasons for dropping out. The content of the three classes was the same for Sessions 3 and 4: discussion, reading, and writing assignments based on the hospital Personnel Manual, Benefits Information, and Method of the Week.

Although the format of the classes in Sessions 3-6 was similar to the opening sessions, time for informal discussion lessened and a more academic atmosphere prevailed. Most of the students seemed to have acquired a sense of purpose which they did not have at the beginning. Janet, along with Phillip and Katherine (also in the 1:30 P.M. class) had set themselves the goal of preparing for the GED exam, as had most of the students in the 8:30 A.M. and 3 P.M. classes. Two other students, who already held high school diplomas, had targeted promotions in the hospital which they were determined to get. One woman, a 40-year old Food Service employee, stayed in class only five weeks because she pursued and obtained a position as an assistant Nurse Anesthetist. In her exit interview she gave credit to HJSEP: "The class motivated me to push myself to go farther instead of sitting back. The more I came to class, the more I wanted to do more. I found I had hidden talents...I started trying to be a more positive person. The classwork itself was uplifting."

This woman and the other students completed their homework assignments on time. In class they practiced their reading with instructor and tutor and made every effort to learn the workplace

vocabulary which occurred in the context of the hospital documents: exempt, non-exempt, bi-weekly, deductions, voucher, shift differential, accrued, and compensatory were some of the words. They prepared themselves well for a quiz over the documents.

Responding to open-ended questions became part of the daily routine during Sessions 5 and 6. During Session 5, the classes focused on strategies for reading comprehension, with hospital memos providing most of the subject matter. Employees' own written essays were also used.

During Session 6, the reading material became more difficult, consisting mainly of the hospital's "Universal Safety Precautions." Students continued to learn workplace vocabulary in context, to discuss safety procedures as they understood them, and to write about them. In the 1:30 class two employees demonstrated the use of the Red Needle Disposal Box, standing in front of the class and explaining in detail.

Responses of the employees to class activities and demands were documented in anecdotal notes kept by the instructor, tutors, and a graduate assistant for HJSEP. When Betsy had been in HJSEP for 7 weeks, the instructor wrote, (Betsy is) "beginning to show excitement at what she has accomplished in speaking, writing, and production of assignments." A month later, Kaleya wrote of Betsy, "Her primary incentive is to surprise her daughter, who is due to return soon from Germany." Of Annie T. Kaleya wrote, (She) "has continued to open up in class; writing is improving. She understands assignments better and asks more questions." After

Phillip had been in class for four months, Kaleya wrote, "Works consistently, attends consistently. Although he describes himself as a slow learner and advances very slowly, his supervisor indicates great improvement in his work." Students generally felt positive about their accomplishments, especially in oral communication.

Supervisors' Classes

At the request of the hospital administration, a literacy class was formed for front-line supervisors in the Housekeeping and Food Services Department. The class met for one eight-week session and one six-week session, two days per week for one hour each day. Specifically, the request was for assistance in writing memos and communicating with workers, who, in many cases, were former co-workers. In order to plan the curriculum, the part-time instructor and curriculum developer conducted a literacy audit of these supervisors' jobs. They interviewed their managers, reviewed written work required by the job, and talked with the supervisors themselves. The managers expressed the need for supervisors to "look better" on paper. They also noted the need to develop problem-solving skills, a more professional manner, and the ability to delegate and think independently. Observation of the supervisors on their jobs revealed that they were verbally competent and could talk knowledgeably about their jobs, but less comfortable with written tasks.

There were 13 students in the class. One was from Security; seven were from Housekeeping; five were from Food Services. In

ability they ranged from basic level of literacy to having finished three years of college. There were no tutors or volunteers in the class. They met around two tables in the lounge of a residence hall. There was no chalkboard, so newsprint was used. The class was scheduled for Tuesday and Wednesday of each week. There was limited carry over from one week to the next as the instructor never knew who was going to be in class. Attendance depended on what was going on in the hospital, and there seemed to be a number of inspections that required supervisors to be available. However, attendance was quite good up until the last two of the eight weeks.

The supervisors' class presented a model for and practice in collaborating on everything--writing, talking, and problem-solving. It was a success socially. It gave a group of people a chance to get together to do some laughing, some ventilating, and some solution sharing. However, its effect on their literacy in the workplace was limited. The class members heard some new ideas and some things they thought might be effective.

There was a general sense among the students from Housekeeping that when they wrote reports and reprimands their writing was changed by their managers. This made all of them quite angry. They wanted to learn to write better so that their writing wouldn't be changed. They felt legally responsible for their writing and wanted it to be their own. They said their writing was changed to sound more like Standards of Conduct "legalese." Learning to write better wouldn't solve that problem. One student, in particular, said she did not like having her writing changed with "longer words

used in place of the words I chose."

After talking about giving positive feedback and giving compliments, during the sixth week, six supervisors gave verbal compliments and one person wrote a complimentary note to an employee. They said the response was terrific. One person followed that up the following day with another compliment; the employee was delighted and the supervisor felt the employee was working harder than ever. Giving verbal compliments was new for them and it was easy to do. The entire lesson was very effective and had an impact on the workplace for that week.

One person used the verbal model, "I feel _____ when you _____ because _____." She found it be very effective. She said using this model with her manager allowed her to state her position without getting angry. She said the manager stopped and listened, and they worked out the problem.

Students worked in pairs on their writing. Sometimes "Editors" dealt with vocabulary, for example how to use the word "undermine" and make sense. Sometimes they dealt with organization. One "Editor" said to one writer, "put the solution right after the problem, and it will make more sense." All collaborative work was quite successful. Role plays were very successful and at the end of the class they said they would have enjoyed more of those.

At the end of the second session, an oral assessment revealed that Housekeeping supervisors were not give any choice about attending. One person resented this. Food service people were

told they had been "selected" to attend. They appreciated this method. Several people said getting definitions of vocabulary words in the Standards of Conduct was very helpful. Others said they were paying more attention to what they were writing, noticing the words they chose. They felt supported in letting others read their writing and planned to continue this on the job. People felt they were doing a better job of expressing themselves and standing up for themselves.

Because there were only two students in the second session of the supervisor's class, it was very productive with a good deal of individual tutoring. Each student was able to write and revise every class session.

The students said working with the Standards of Conduct document was the most valuable part of the class. They have to use Standards of Conduct with their employees and hadn't known what it meant. They used the words, but didn't know their meaning. They previously felt very frustrated by this document. There were several sentences they never did understand. They wrote several revisions of the Standards; however, in essence, they wrote what they thought needed to be included, without deciphering the document.

The idea of giving positive feedback was new to them. Neither student had ever done that and didn't know how. They tried giving compliments and found it successful. They also found it very difficult to evaluate themselves positively. This was as new to them as evaluating someone else positively.

Students could not look at their jobs in discrete segments, nor describe what they did. When asked to describe the job, they said it took patience and hard work to do. They generalized about the job in terms of what they do first thing in the morning, what they do after that. They began developing a list of tasks and from that list were able to develop job descriptions that were task-oriented.

One student was looking for another job. We developed a list of transferrable job skills. She was delighted with this. It gave her a way to talk about her job in interviews. One of the final letters written was a self-evaluation written to the student's managers. This was difficult for them to do. They didn't know what they did well and what they needed work on. We focused on what they did well. It was very useful and followed the development of the job description very well.

Students in the second session attended class quite regularly. One student missed one day. They said it was quite helpful to them. There may be no way to measure this, but they had a good time and felt supported as learners.

Interview Results

In order to assess the effect of the program from the participants' and supervisors' view points, interviews were held with employees and their supervisors. They were asked to comment on the effectiveness of the program and whether their own goals were met.

Interviews with Participants. Workers were interviewed

individually by the graduate research assistant as part of the post-testing completed by each participant. They were asked four questions.

1. Why did you start coming to class? Most participants (58.5%) were recruited by a hospital supervisor. Others (9.8%) were recruited by the instructor. The remaining heard about the class from a co-worker (7.3%), saw a notice on the bulletin board (7.3%), had a personal goal they wanted to achieve (2.4%), or did not give a reason (14.6%). These results are an indication of the involvement of the hospital in the workplace literacy partnership program. They saw the classes as an opportunity to encourage and reward selected workers while helping these persons increase their workplace literacy skills.

2. Why did you stop coming to class? (This question was asked of participants did not re-enroll after completing at least one session of classes but who took the post-tests.) Work-related reasons were most common (41.3%), followed by family-personal reasons (37.9%), and health-related reasons (20.1%). The work-related reasons included "short" on the job and seasonal work (i.e., sewing uniforms for new resident doctors who come to this teaching hospital every summer). Supervisors indicated that if several persons were absent from a shift (illness, vacation, rotation day-off) they could not allow additional persons to leave work to attend class because the work would not get done on that shift. This problem is an artifact of the decision to hold classes during work time. While that decision had many positive effects

on the program, in this instance it became a liability. Family and health reasons were similar to those found in adult education literacy programs (Boraks & Richardson, 1985; Beaudin, 1982) with the exception of child care and transportation which were not applicable in this situation because instruction was on job time and job site. For example, employees mentioned that they had to care for young children and/or aging parents after work. This prevented them from working overtime to finish work they did not complete because they were in class.

A few of the drop-outs (29% of those who enrolled in the program and completed less than one session of classes and were not post-tested) were interviewed as to why they dropped out of the program. One stated, "Just lazy, I guess." Another already had a high school diploma and felt she knew everything being covered in the classes (57% of the participants in the program already had high school diplomas).

3. What are some things that you feel you got out of class? Participants noted improved academic skills (61%), oral expression (39%), and written expression (34%) as a result of attending classes, reflecting the literacy objectives of the curriculum. They also noted refreshment of former learning (24%) and knowledge of current events (7%). The latter resulted from reading articles about the hospital in the local newspaper. Another result of the program was increased confidence and courage (27%) reflecting the participants' improved self-concept. The instructional objectives and curriculum for HJSEP were directed toward the literacy demands

of the targeted hospital jobs, not the content of the jobs. However, since actual job texts and scenarios were used for instruction there was some incidental instruction of job tasks. This resulted in 29% of the participants stating that they had increased job knowledge as a result of participating in the program.

Participants specifically mentioned help with vocabulary development, spelling, use of the dictionary, and writing. One said, "I hadn't used my mind in a long time." Another, "It woke up my mind in certain areas." These observations may indicate that workers were better prepared to engage in problem-solving techniques on the job as a result of participation in HJSEP. Another participant stated that "The class motivated me to even push myself to go farther instead of to sit back." Other participants mentioned improved oral expression including speaking more clearly, pronouncing words correctly, asking for information in a positive manner, and giving oral directions to others.

4. Was your job objective met? Only 15% of the participants said that their job objective was met. There appear to be several reasons for this low figure. First, some (31%) did not have a specific job objective in mind. Perhaps this is related to the fact that 59% of those attending were recruited by a hospital supervisor. Others' job objectives were interrelated with the fact that they had not obtained a high school diploma or GED, prerequisites for nearly all advancement at the hospital. Many had the rather long-range goal of obtaining a GED in order to get a

better job, even though they had difficulty reading pre-GED materials; they did not see progress toward attaining this goal in the relatively short time span of HJSEP. For others that was a shorter-range, more realistic goal, and they saw progress toward attaining it during HJSEP.

One woman enrolled in the HJSEP program for only one session before going on to take a medical terminology course. She said that she did well in that course, "because the [HJSEP] class taught me to study." A food service worker used the class "to build my skills and to make myself feel better about myself." After one session of HJSEP, she applied for and obtained a job as an assistant nurse anesthetist.

Twelve persons stayed in the program through the last session of classes completing an average of 28 weeks (4.67 sessions) of instruction. Fifty-eight per cent of these persons said that what they gained from the classes was confidence. One-third indicated improvement in their academic skills, reading, spelling, and math. The difference in these figures and those of the total group reflect, in part, the early emphasis in the curriculum on oral expression and speaking in front of groups and the increased emphasis in later sessions on written expression (reading and writing). These 12 participants gave both affective and academic responses when asked what they got out of class. For example, "Class inspired me; let me know I could accomplish some of the things I wanted." "I didn't think I could learn, but I found out I could." "Each time I came, I learned a little more

about different things." "I was learning some things I really wanted to know." "I wanted to learn more about how to do different things and to progress in getting a better job." "I would like to better my education." "I got a lot out of the class. I learned to read and write better." Half of this group had the GED as a goal and saw the classes as a help in attaining this goal. Six persons took the GED while attending HJSEP; two came close to passing it and are preparing for a retake. Others mentioned the effectiveness of the instructors, noting their patience and understanding. "When I go wrong, you all don't holler at me. You don't fuss." They also noted that they enjoyed being with the group, both the other students and the instructors. For these twelve participants the HJSEP classes fulfilled personal, academic, and job goals. Those who do succeed in attaining a GED will be eligible for consideration for promotion to front-line supervisor or other better positions in the hospital. While no one attained that goal during the program, several made strides toward doing so.

Interviews with Supervisors. Five supervisors and managers in the food services, housekeeping, and laundry departments were interviewed to determine the effect of participation in HJSEP on 14 of the workers' and supervisors' job performance. They were each asked five questions.

1. Have you observed any changes of attitude in these employees since participation in HJSEP? Changes were noted in the attitudes of nearly half of the employees (46%), but not in the others (54%). Positive comments included, "He is more positive;

he doesn't dodge paperwork so much." "She shows more initiative, confidence, and awareness of responsibility." "She is more sociable now. She talks more and is more cooperative." For employees showing no change, comments included: "Lacks enthusiasm and desire to get better." "Already had a positive attitude." "No, the class didn't change her." "I think she has problems outside of class and outside the hospital which keeps her from concentrating."

2. Have you observed any change in this employee's job performance since participating in HJSEP? Some positive change was noted for about half of the employees, but for two of them it was a temporary change. Two others for whom there was no change were already perceived to be competent workers. Positive comments include: "More initiative being shown now." "Using better oral expression now." "Changed for the better. The classes made him aware of what's expected." Other comments noted the temporary improvement: "[Performance] went up and then back down." "Did better for two to three weeks after the program ended, then went back to his old ways. [His] writing's not improved either."

3. Have you observed changes in the way this employee follows or gives verbal directions for completing a task? Supervisors responded to this question for only seven of the participants. For those, they stated that half (57%) were doing so. "He is better about taking directions now." "There has been improvement. He follows up well." "She is better now at following verbal and written instruction." "Now he writes things down, then

gives directions."

4. Has this employees's performance evaluation changed in any way since participating in HJSEP? There is a new performance evaluation system (numerically-weighted form) being instituted at the hospital. It is not yet fully implemented so this question had to be eliminated.

5. Have you observed any changes in the way this employee makes requests, interacts with co-workers, or negotiates disputes since participating in HJSEP? Only managers of participants in the supervisor's class were asked this question. They did not see any change, but most noted that supervisors get along well with one another. Another commented that the supervisor under him was "a good, positive person anyway." It may be that the selection of supervisors takes this skill into account so that only persons interacting positively are promoted.

Supervisors also commented that the program helped the employees, not the hospital. Other supervisors went on to say, however, that it benefitted the hospital because it benefitted employees. That was the attitude of the hospital administration also; if the program was seen by employees as a benefit to them, then it would promote goodwill for the hospital in the community.

A major problem in the HJSEP program was attendance in the classes. Releasing workers during job time became an issue. If it had a negative affect on the shift in getting work accomplished, as it frequently did, supervisors either let workers come to class reluctantly or refused to let them attend that day. Several

supervisors mentioned this problem in the interviews. The hospital does not fund vacation, sick time, holiday, or training relief, although it does maintain a complex rotation off system to keep the hospital staffed on a 24-hour per day, 7-day per week basis. The lack of back up employees created a problem for many supervisors when these classes were implemented on job time. Some supervisors worked overtime to complete work on class days, but the managers discouraged this as they could not pay them for overtime. This problem was more severe in the supervisors' class than in the workers' class although it was a factor for both. In general, supervisors and managers felt that the participants were enthusiastic about the program; they saw some improvement in attitude and job performance; and they expressed a desire for the program to continue. One manager was concerned about employee's failure to follow procedures on the job, their lack of attention to detail, and their lack of responsibility. These were not, however, specific objectives of this workplace literacy program.

The interviews with the participants and supervisors indicate that the hospital job skills enhancement program had many positive effects on workers and some direct benefits to the hospital in job attitudes and communication skills. There were also indirect benefits to the hospital resulting from employee attitudes and community goodwill.

Job Attendance, Promotion, and Retention

Another assessment of the effectiveness of the Hospital Job Skills Enhancement Project was through analysis of the job

attendance, promotion, and retention data. Questions of interest were the effect of the program on job attendance before, during, and after instruction and on the promotion and retention of employees in the program.

In order to analyze the effect of the program on job attendance, employee personnel records were reviewed for each participant for the period they attended the program, the comparable period the preceding year, and the three months following their participation in the program. These data were analyzed to determine whether there were differences in absenteeism before and during classes, during and following classes, and during classes on class and non-class days. These attendance figures were compared using *t*-tests. It was found that participation in HJSEP did have a positive effect on work attendance. There was a significantly lower absentee rate during an employee's participation in the HJSEP classes than in the three-month period following class participation ($p = .053$). There was also a significantly lower absentee rate on class days than on non-class days during the employee's participation in the instructional program ($p = .000$). There was not, however, a difference between absentee rate before and after participation in the program or between a comparable period before and during classes. (See Table 10.) These results suggest that the workplace literacy program was a motivating factor for these employees to come to work on class days during the period of their participation in the program. It was not, however, a long-term motivation because their lowered

Table 10

Job Absentee Rate

	M	SD	N	t	p
Before* & During Classes					
During Classes	10.59	7.31			
			39	-1.36	0.183
Before Classes	13.05	9.08			
During & After** Classes					
During Classes	10.50	7.24			
			40	-2.00	0.053
After Classes	13.68	10.88			
Before & After Classes					
Before Classes	13.05	9.08			
			39	-0.28	0.780
After Classes	13.72	11.02			
Class & Non-Class Days					
Class Days	3.10	2.53			
			41	-4.87	0.00
Non-Class Days	5.98	4.88			

* A comparable period the preceding year

**3 months following class attendance

absentee rate did not continue in the period following their participation in class. This raises the question of why attendance was increased during class. Was it the activities in class, the opportunities to improve literacy, the increased social and personal affirmation in the class? Or was it the opportunity to have paid time off in the form of participation in an instructional event during job time at the job site? Both sets of reasons are possible explanations for these results.

Two participants in the class obtained promotions or better jobs during or following the classes. Two persons left the hospital for other work. All other participants, including dropouts, retained their same positions at the hospital. Thus, participation in HJSEP had relatively little effect on promotion and retention for these participants. It should be noted that the participants had been employed at the hospital for an average of 10 1/2 years. There is very little turn-over in the targeted jobs at this worksite. Further, a high school diploma or GED is a prerequisite for promotion or attainment of most better positions at the hospital and 43% of the HJSEP participants did not have this prerequisite.

Evaluation of the Hospital Workplace Literacy Project

A project consultant, Jorie Philippi, served as the external evaluator for the Hospital Job Skills Enhancement Program. She made four site visits to the project and reviewed materials between site visits. The purposes of her involvement were to provide training in the development of workplace literacy program

instructional materials, feedback on workplace literacy instructional materials developed, and information input for project staff decisions concerning data collection and preparation of the project documentation. Her report is presented in Appendix D.

The project was evaluated in several areas--student accomplishments, job productivity, impact on the hospital and workers, and curriculum undeveloped.

Student Accomplishments

Participants in the program made significant gains in literacy (reading, writing, oral communication, and problem- solving) as measured by the pre- and post-tests. In interviews they indicated that the program had a positive effect on their academic skills and helped them improve their confidence and courage. Several made progress toward their goal of obtaining a GED. Supervisors noted some improvement in worker attitudes and in literacy skills on the job. Two employees obtained better positions and several are enrolled in other job skills classes (typing, medical terminology) or are continuing literacy instruction with tutors.

Job Productivity

Supervisors indicated that participation in the program was positively related to employee attitudes though not necessarily to job performance. Improvement in employee literacy, communication skills, and morale was seen to benefit the employees directly and the hospital indirectly, especially through improved community goodwill toward the hospital. The planned measure of job

performance could not be implemented because the hospital was in the process of developing and field-testing a new quantitative performance evaluation system. Data were not available to assess participants' job performance before, during, and after Hospital Job Skills Enhancement classes. Workers' job attendance increased significantly during the project on class days, but this increase in worker job attendance did not continue after the project ended.

Project Impact

The project had a positive effect on both the hospital and the workers. Several hospital personnel indicated that they would like the program to continue, noting that improvement to employee skills and attitudes had at least an indirect benefit to the hospital. There was, however, one negative effect of the program on the hospital. Holding classes on job time meant that participants had to be released from work. This often caused problems on the shift (creating a worker shortage which meant work did not get done). The result was that frequently supervisors or managers refused to let participants attend class when the running of the hospital was to be negatively affected. This created a low class attendance rate and some concern on the part of the participants, their supervisors, the instructors, and the research staff.

Through newspaper articles and a videotape the project has come to the attention of other hospitals in the area and, at least one is planning a workplace literacy program modelled on this project. The published curriculum will be available to them and other interested hospitals. The research data collected by the

Center for the Study of Adult Literacy through this project are being analyzed and prepared for publication through professional journals and presentation at professional conferences.

Curriculum

The Hospital Job Skills Enhancement Program Curriculum provides a framework for other hospitals to develop and implement a workplace literacy program. By applying the information on how to conduct a literacy audit; how to analyze the resulting material for literacy skills; and how to develop objectives, instructional activities and materials, and literacy assessment measures, a hospital could adapt the curriculum to meet the literacy needs of its employees. The Center for the Study of Adult Literacy is working with other hospitals to adapt the curriculum to their needs and will evaluate these efforts as they are completed.

Conclusions

The Hospital Job Skills Enhancement Project was successful in improving workers' skills in reading, writing, oral communication, and problem-solving using job-related tasks and texts. There was a high retention rate in the classes and worker attendance increased during the program. Workers and supervisors evaluated the efforts positively, and the hospital felt the program had a positive impact on the workers and indirectly on the hospital. The model evaluated was a workplace literacy program in which the curriculum was based upon a literacy audit of the targeted jobs. The analysis of the literacy demands of these jobs provided the literacy objectives for the curriculum. Lessons were developed to

attain these objectives using texts and other literacy materials specific to these jobs and generic across jobs. Instruction and assessment were developed from these materials based upon a pragmatic, integrated model of literacy instruction. That is, reading, writing, oral communication, and problem-solving were presented together as on actual jobs. The quantitative and qualitative analyses of this project indicate that this workplace literacy instructional model is effective in increasing job-related literacy and has a positive impact on the workers and the employer.

Because classes were held at the job site and on job time, workers felt that the employer valued their participation in the program. Problems with child care and transportation were eliminated and an automatic reward (paid leave) was provided. However, having classes on job time created problems with class attendance when workers could not be spared from the job to attend class. In order to be effective, the employer needs not only to release employees from their jobs to attend class, but also to make arrangements for their work to be covered while they are gone. Such arrangements may be costly and difficult in many work settings, but they are essential to the effectiveness of such a program.

The success of the Hospital Job Skills Enhancement Project supports the use of workplace literacy instruction to address the problem of illiteracy in America. Business, labor, and government representatives continue to call for educators to join them in workplace literacy programs as an effective way to prepare a

workforce for the 21st century (Askov, Aderman, & Hemmelstein, 1989; Carnevale, Gainer, & Meltzer, 1988; Chisman, 1989; Hudson Institute, 1987; Mendel, 1988; U.S. Departments of Labor & Education, 1988; U.S. Departments of Labor, Education, & Commerce, 1988). Use of the Hospital Job Skills Enhancement Program Curriculum is an effective approach to such an effort.

Limitations & Recommendations

There were several limitations to this study. It was conducted in only one hospital and there was no control group, limiting generalizations to other populations. The hospital was, however, typical of urban public hospitals in the South. Conducting the program on job time meant that a limited number of workers could participate, and participants were frequently absent from class due to job demands. Another limitation is the absence of a standardized measure of literacy. The curriculum was based on the literacy materials and demands of the jobs and, thus, it was appropriate to base assessment materials on the same materials. However, the literacy levels can not be easily compared to those obtained in other projects. An area needing research is the development of an effective standardized means of assessing workplace literacy skills.

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APPENDICES

Appendix A

Curriculum Outline For Classes

Instruction in the classes for workers was divided into six sessions of six weeks in length. Each session emphasized one or two instructional themes around which reading, writing, and oral communication activities were focussed. The themes and texts were:

Session 1: Informational texts of the workplace: Reading, Writing, & Oral Communication

- Grady personnel "Yellow Pages"
- Grady checkstub & memo

Session 2: Informational texts of the workplace: Reading, Writing, & Oral Communication

- Grady personnel "Yellow Pages"
- Grady checkstub & memo

Session 3: Procedural documents of the workplace: Reading, Writing, & Oral Communication

- Grady Personnel Manual
- Grady benefits information

"Method of the Week" (Housekeeping)

Session 4: Procedural documents of the workplace: Reading, Writing, & Oral

Communication

Grady Personnel Manual

Grady benefits information

"Method of the Week" (Housekeeping)

Session 5: Interoffice communications/memos: Reading, Writing, & Oral Communication

Employee commendations & warnings

Session 6: Universal safety precautions: Reading, Writing, & Oral Communication

Grady safety precautions

Instruction for the Supervisors' class was divided into two sessions of eight and six weeks each. Instructional themes and texts were:

Session 1: Reading texts used on the job.

Standards of Conduct

Writing used on the job.

Memos to employees

Job descriptions

Narratives of employee behavior

Oral communication used on the job.

Verbal warnings to employees

Interviewing

Problem-solving

Session 2: Reading texts used on the job.

Standards of Conduct

Employee Assistance Program pamphlet

Writing collaboratively & revising.

Letters to supervisors & employees

Giving positive feedback.

Verbal compliments

Letter to employees

Appendix B

Process Writing Scoring Guide

6 Ideas are very well developed and expressed.
The writing has fully developed structure.
The ideas are connected logically and are well organized.
There is good sentence variety and expression.

5 Ideas are fairly well developed and expressed.
The writing has a discernible structure.
The ideas are connected logically, but they are not so fully developed or so well organized as score 6 papers.

4 Ideas are only loosely connected or not developed.
The structure may be disjointed, but what is provided is clearly more than a list.
The ideas are relevant but are not developed or expressed well.
The sentence structure may be repetitive.

3 Ideas lack development.
The writing often merely lists ideas.
The phrasing and sentence structure are repetitious.

2 Ideas have little or no relationship to the topic.
An idea or a list is provided that is not connected logically to the topic.

1 Lack of ideas.

All that is presented is a restatement of the question or topic to be addressed.

UN Undecipherable

BL Blank

Adapted from Zurn (1987)

Appendix C

Oral Communication Comprehensibility Rating Scale

Form

Style of expression	1 Too casual Too formal	2	3	4 Appropriate	5
Clarity of expression	1 Unclear	2	3	4 Comprehensible	5

Content

Suitability of content	1 Unsuitable	2	3	4 Suitable	5
Accuracy of information	1 Inaccurate	2	3	4 Accurate	5
Amount of information	1 Too little Too much	2	3	4 Appropriate	5
Logical sequence of information	1 Incorrect	2	3	4 Correct	5
Adequacy of rationale/ explanation (optional)	1 Inadequate	2	3	4 Adequate	5

Adapted from Cohen (1980)

Appendix D

Sample Instructional Plan

From Session 5: Interoffice Communications/Memos*

Task	What Students Must Know	Literacy Processes & Objectives	Lesson Plans
Reading interoffice communications.	5. Must be able to determine missing or unclear information in text.	5A. Students will be able to generate verbally & in writing questions about the memo topic which are NOT explained.	Using the Smoking Cessation memo, students generated questions not answered in the memo. These were written on an assignment sheet (attached).
		B. Students will be able to locate information in the text which will enable them to formulate a plan for locating information.	B. Students answered questions by locating information in the memo after discussing how they would find the information on the memo (attached).

*For complete description of Session 5, see Hospital Job Skills Enhancement Program Curriculum

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303-45805 PD

INTER-OFFICE COMMUNICATION
The Fulton-DeKalb Hospital Authority
Atlanta, Georgia 30335-3801

TO: ALL EMPLOYEES

September 19, 1988
Date

FROM: EMPLOYEE HEALTH CLINIC

RE: Smoking Cessation

EXT: 5-4601

BOX: 26178

Smoking Cessation classes have been approved for Grady Memorial Hospital Employees. There will be twelve (12) classes offered consisting of 14 sessions each. (Each session 30 minutes).

Beginning	
October 3, 1988	6:30 a.m. - 7:00 a.m.
	9:00 a.m. - 9:30 a.m.
	1:00 p.m. - 1:30 p.m.
	3:00 p.m. - 3:30 p.m.
October 24, 1988	6:30 a.m. - 7:00 a.m.
	9:00 a.m. - 9:30 a.m.
	1:00 p.m. - 1:30 p.m.
	3:00 p.m. - 3:30 p.m.
November 21, 1988	6:30 p.m. - 7:00 p.m.
	9:00 a.m. - 9:30 a.m.
	1:00 p.m. - 1:30 p.m.
	3:00 p.m. - 3:30 p.m.

The fee for the above classes will be $19.00 payable the 1st day of class. If the employee remains smoke free for 6 months the 19.00 will be refunded.

If you are interested in these classes please detach and send to the EMPLOYEE HEALTH CLINIC

NAME_____ DEPT._____
EXTENSION _____
BEGINNING DATE OF CLASS _____
TIME OF CLASS _____

Directions: Read the attached memo "Inter-Office Communication" and answer the questions, basing your answers on this memo.

When several answers are given, choose one only. Please circle the letter in front of the answer you choose.

1. This memo is written to:
   A. Part-time employees only
   B. Laundry and housekeeping employees only
   C. All Grady employees
   D. Employees in the health clinic

2. Circle the words on the memo which helped you answer question 1.

3. Look at Re: on the memo.
   What does Re mean? _____
   _____

   What is this memo about? _____
   _____
   _____

4. Circle the words on the memo which helped you answer question 3.

5. What does smoking cessation mean? _____
   _____
   _____
   _____

6. Read the entire memo. If you take these classes what will you learn to do? _____
   _____
   _____
   _____

7. How much must you pay to take these classes? _____
   _____
   _____
   _____

8. Is there any way to get your money back after taking these classes? _____
   How? _____
   _____
   _____

9. If you enroll in these classes, how many sessions would you be expected to attend? _____
   _____

10. Underline the words in the memo which help you answer question #9.

11. How long will each class session last? _____

12. Underline the words in the memo which help you answer question #11.

13. Some information on this memo is confusing and is not clearly written. What questions do you have about this information? List your questions.

14. To whom would you ask these questions? _____

15. Who would you call if you wanted more information about these classes? _____

Appendix E

External Evaluator's Report

Jorie Philippi

The role of the workplace literacy consultant to this project consisted of three major functions:

-providing training in the development of workplace literacy program instructional materials;

-providing feedback on workplace literacy program instructional materials developed; and

- providing information input for project staff decisions concerning data collection and preparation of project documentation.

Activities focussing on the above-mentioned functions were conducted both on- and off-site over the duration of the project. Four on-site visits were made by the consultant, in addition to regular mail and telephone communications with the project director and assistant director. A description of the consultant's activities follows.

Review of Materials and Feedback:

- Prior to meeting with the project staff on-site, the consultant received portions of the proposal to review during the month of October, 1988, to become familiar with the overall design and goals of the project.
- Following the first on-site visit, (October 23-25,

1988), the consultant received copies of print materials early in November, collected by project staff from the worksites at the hospital. During the months of November through April, the consultant received and reviewed sample curriculum lessons developed by project staff. Feedback on these materials revealed the need for additional training and staff development on the functional context approach and the conducting of literacy task analyses in the workplace.

- Prior to the second on-site visit, the consultant received copies of information about model evaluation format from the project director. This information had been obtained from the project officer at the U.S. Department of Education. Feedback on this information resulted in discussion of data collection design and components and format of the final report.
- Following the second on-site visit, (May 5-7, 1989), the consultant received and reviewed documentation of worksite literacy task analyses, along with copies of a newly developed curriculum lesson unit. Feedback on these materials indicated no immediate need for revisions of lesson materials.
- Following the fourth on-site visit, (January 8-10, 1990), the consultant received and reviewed copies

of draft versions of the project products, i.e., the final report and the curriculum document. The purpose of the review was to provide feedback on accuracy and inclusiveness of detail in contents and appropriateness of documents for targeted audiences.

Training:

- During the first on-site visit, (October 23-25, 1988), the consultant provided training for the project staff in conducting literacy task analyses in the workplace and the development of workplace literacy instructional programs from the results of the literacy task analyses. This visit also included a work-site visit to the hospital and interviews with line supervisors in each of the three departments selected to participate in the project. The training was attended by the project director and assistant director, the classroom instructor, and other consultants and staff involved with project curriculum development. Training consisted of an overview of functional context research and rationale, hands-on instruction in conducting and documenting a literacy task analysis, and review/discussion of sample workplace literacy instructional materials resulting from literacy task analyses. Additionally, there was discussion and

planning of application of training to the specific curriculum development needs of the project. This included suggestions for employee subjects of literacy task analyses, recruitment of program participants, location of classroom, and scheduling of class times.

- During the second on-site visit, (May 5-7, 1989), it was necessary to address the need for revisions in both the developed curriculum and instructional delivery. The curriculum lessons that had been reviewed by the consultant revealed the use of many traditional basic skills methods and materials that contrasted with the stated instructional goals of the program. Additionally, the project administrators had expressed concerns about the over-emphasis of learner self-efficacy observed in instructional delivery. Because of instructional time constraints, this, too, was interfering with achieving the stated program goals, i.e., to enhance the job performance and promotability of hospital workers through the improvement of basic skills used on the job. The consultant addressed both issues through provision of training on documentation of the literacy task analyses in a two-column format, which identifies the instructional objectives as they relate to targeted job tasks. The need to

interview competent workers while observing them perform their job tasks, in order to obtain the literacy task analyses information required to create such documentation, was also addressed in training. Plans were discussed to apply training to the specific needs of the project. These included conducting additional literacy task analyses and the development of a table of specifications for the curriculum units yet to be written.

Input of Information:

- During the third on-site visit, (June 19-21), the consultant participated in discussions with the project director and assistant director, along with other project staff involved in decision-making roles. The topics of discussion centered on formative and summative evaluation of the project. Four classroom observations were conducted by the consultant, accompanied by other project staff members, to determine the effectiveness of curriculum implementation. The consultant observed, timed, and recorded simultaneous learner and instructor activities during classes. These records provided information for the instructor and the project team on effective delivery of planned instructional activities, learner time-on-task, and

learner reactions to instruction. This information was then used by the project administrators and curriculum developers to make decisions about revisions to instruction. During this on-site visit, data that had been collected to date were also reviewed and discussed. Recommendations were reiterated by the consultant, concerning the need to collect information from line supervisors at the worksite about observable or measurable changes in participants' job performance following instruction, and impact of the instructional program on the three participating departments.

- During the fourth on-site visit, (January 8-10, 1990), the consultant reviewed evaluation data compilations. Discussions were held with project administrators and other project staff concerning the preparation of the final report and the curriculum document for post-project dissemination. Suggestions were made by the consultant for organization of information selected for inclusion in both products. Additionally, the consultant viewed the first cut of a 20-minute video tape being produced for post-project dissemination. Recommendations were made by the consultant for placement of the video and other project products in professional publications and for submitting of

conference presentation proposals to organizations that would increase awareness of the availability of the results and products resulting from the project.

Conclusions:

The project was well-designed and administered. Literature searches, involvement of qualified and experienced personnel, and attention to detail in the planning stages were in evidence throughout the 15-month period of involvement. Project activities adhered to the proposed schedule and focussed on achievement of stated project goals. Issues arising during the implementation of the project were dealt with professionally and expeditiously. Analyses of data collected indicate that the curriculum achieved its objectives. Synthesis of information contained in project documents appears to indicate that the project met its stated goals.

Appendix F

Dissemination Plan

Media Products

Videotape, "Workplace Literacy: A Challenge for the 1990's." A 20-minute video presenting the Grady Hospital Job Skills Enhancement Program including interviews with staff, instructors, and students.

Reports

Nurss, J.R. (1990). Hospital Job Skills Enhancement Program: A Workplace Literacy Project Final Report. Atlanta, GA: Center for the Study of Adult Literacy, Georgia State University.

Chase, N.D. (1990). Hospital Job Skills Enhancement Program Curriculum. Atlanta, GA: Center for the Study of Adult Literacy, Georgia State University.

Articles

Nurss, J.R. & Chase, N.D. (1990). Workplace Literacy: A Tool for Recruitment. Adult Literacy & Basic Education, 13 (1).

Hiles, J. (1990). Interim Progress In A Model Workplace Literacy Program. Georgia Education Researcher.

Papers

"The Reading-Writing Connection in Adult Literacy" Georgia Write Now Conference, Atlanta, January 1989,

Joanne Nurss & Nancy Chase.

"Literacy As Empowerment In the Workplace", Southeastern Women's Studies Association Conference, Atlanta, March 1989, Nancy Chase & Sheryl Gowen.

"Workplace Literacy," Georgia Council of International Reading Association Conference, Atlanta, March 1989, Joanne Nurss & Nancy Chase

"Literacy Instruction on the Job: Opportunities for New Partnerships," Commission on Adult Basic Education Conference, Atlanta, March 1989, Joanne Nurss & Nancy Chase.

"Grady Hospital's Literacy Program," Literacy in the Workplace Conference, Columbus, GA, September 1989, Joanne Nurss & Nancy Chase.

"Interim Progress in a Model Workplace Literacy Program," Georgia Educational Research Association & Georgia School Test Coordinators Conference, Atlanta November 1989, Judy Hiles.

"Literacy Research & Instruction in the Workplace: Possibilities & Constraints," North American Conference on Adult & Adolescent Literacy, Washington, DC, January 1990, Joanne Nurss & Nancy Chase.

"Marketing Adult Education: Workplace Literacy Projects: Recruiting," Teachers of English to Speakers of Other Languages Conference, San Francisco, March 1990, Joanne Nurss.

"Writing as a Vehicle for Developing Text Orientation in the Workplace," accepted for Modern Language Association

Conference, Pittsburgh, September 1990, Nancy Chase.

"Moving On In Life: Stories & Reflections From A Workplace Literacy Project," accepted for Modern Language Association Conference, Pittsburgh, September 1990, Sheryl Gowen & Judy Hiles.

Workshops

"Conducting a Workplace Literacy Audit," Georgia Adult Literacy Association, Atlanta, November 1989, Nancy Chase & Joanne Nurss.

Talks

"Workplace Literacy," Georgia Department of Labor Commission on the 21st Century, Second Chance Committee, Atlanta, August 1989, Joanne Nurss.

Dissertation

Gowen, S. (1990). "Eyes on a Different Prize": A Comparative Study of Beliefs about Literacy, Competence, and Change in a Workplace Project for Employees of Color. Unpublished doctoral dissertation, Georgia State University, Atlanta.

Student Research Papers

Hiles, J. (1989). Workplace Literacy: Meeting the Needs of the Worker & the Workplace. Unpublished paper submitted for EDLA 859, Georgia State University, Atlanta.

Hiles, J. (1989). Interim Progress in a Model Workplace Literacy Program. Unpublished paper submitted for EDCI 966, Georgia State University, Atlanta.

Additional Dissemination Plans

Articles will be prepared for journals such as:

Adult Learning

Journal of Reading

Basic Writing

Journal of Reading Behavior

Training

Personnel Administrator

Proposals will be sent to conferences such as:

- National Council of Teachers of English
- American Association for Adult & Continuing Education
- American Society for Training & Development.

Articles will be prepared for newsletters of health care and human services providers and for the Business Council for Effective Literacy.